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**WHAT IS CLAIMED IS:**

1. A method for systemic modulation of an inflammatory reaction in an individual in need comprising administering to said individual an effective amount of chemotactic factor inhibitor selected from the group consisting of an S100 protein, a protein of the MRP family, calprotectin, and calgranulin.
2. The method of claim 1, wherein said modulation totally or partially inhibits said inflammatory reaction or totally or partially increases said inflammatory reaction.
3. The method of claim 1, wherein said inflammatory reaction is selected from the group consisting of arthritis, chronic polyarthritis, rheumatoid arthritis, gout, asthma, psoriasis, paraneoplastic syndrome, tumor-induced inflammatory diseases, turbid effusions, collagenosis, postinfectious arthritis, seronegative spondylarthritis, vasculitis, sarcoidosis, arthrosis, cell chemotaxis, cell migration, cell recruitment, proteolysis, oxidative burst, radical oxidation, acute myeloid leukemia, chronic myeloid leukemia or acute lymphoid leukemia and graft rejection.
4. The method of claim 1, wherein said inflammatory reaction is mediated by at least one cell selected from the group consisting of a neutrophil, a monocyte, a platelet, a synoviocyte, a macrophage, a lymphocyte, a leukocyte, and a phagocytic cell.
5. The method of claim 1, wherein said administration is performed by intravenous, oral, intranasal, subcutaneous, topical, or intraperitoneal administration.

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6. The method of claim 1, wherein said individual is a human or an animal.
7. The method of claim 6, wherein said animal is a mammal.
8. The method of claim 1, wherein said effective amount is an amount of S100 protein inhibitor effective to induce inhibition or activation of an inflammatory reaction.
9. The method of claim 1, wherein said inhibitor is an antibody or a fragment thereof binding to said S100 protein or to a receptor or a cofactor thereof.
10. The method of claim 1, wherein said inhibitor is a sense or an anti-sense mRNA, or an inhibitor of transcription or translation of said S100 protein factor, or an inhibitor of activity acquisition of said chemotactic factor.
11. The method of claim 1, wherein said S100 protein is an S100A8, S100A9, or an S100A12 protein, or a binding peptide thereof.
12. A composition for modulating an inflammatory reaction comprising a therapeutically effective amount of a chemotactic factor inhibitor selected from the group consisting of an S100 protein, a protein of the MRP family, calprotectin, calgranulin, and pharmaceutically acceptable carrier.
13. Use of a S100 protein, a protein of the MRP family, a calprotectin, or a calgranulin inhibitor in the manufacture of a composition for modulating an inflammatory reaction.